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Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2010; month=6; day=22; hr=11; min=0; sec=21; ms=256;]

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Reviewer Comments:

<210> 1

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> beta-D-amino-LNA Monomer

<400> 1

tccgtcatcg ctcctc

16

Ideally, the explanation for "<213> Artificial Sequence" should be in a separate <220>-<223> section. See below for example:

<213> Artificial Sequence

<220>

<223> beta-D-amino-LNA Monomer

Please use "modified_base" as the <221> response; it corresponds with the WIPO Table 5. Please indicate the base(s) modification in a separate <220>-<223> section; see below:

<220>

<221> modified_base

<222> (1), (2), (3), (13), (14), (15)

<223> please indicate the modification in the <223> response

The above errors also appear in subsequent sequences.

<210> 8

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220> FEATURE

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> beta-D-amino-LNA Monomer

<400> 8

tccgtcatcg ctcctc

16

Please follow the above-mentioned corrections. Also, please remove "FEATURE" from the <220> response: <220> never has a response: it is a "header" only. Same error in Sequence 11.

<210> 16

<211> 15

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> (1), (2), (3), (4), (12), (13), (14), (15), (16)

<223> beta-D-thio-LNA Monomer

<400> 16

tttgatcatcg tcttt

15

The above <220>-<223> section needs correcting (per the above suggestions). The <221 response shows "16": there are only 15 nucleotides in the sequence.

<210> 23

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220> Modified-base

<222> alpha-L-oxy-LNA Monomer

<400> 23

ttccgtcatc gtcttt

16

Please remove the <220> response: <220> never has a response. Please ensure that no <220> has a response. Please correct the <220>-<223> section, per the above directions.

Application No: 10535472 Version No: 2.0

Input Set:

Output Set:

Started: 2010-06-10 17:54:46.987
 Finished: 2010-06-10 17:54:53.731
 Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 744 ms
 Total Warnings: 32
 Total Errors: 61
 No. of SeqIDs Defined: 30
 Actual SeqID Count: 30

Error code	Error Description
W 213	Artificial or Unknown found in <213> in SEQ ID (1)
E 257	Invalid sequence data feature in <221> in SEQ ID (1)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (1)
W 213	Artificial or Unknown found in <213> in SEQ ID (2)
E 257	Invalid sequence data feature in <221> in SEQ ID (2)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (2)
W 213	Artificial or Unknown found in <213> in SEQ ID (3)
E 257	Invalid sequence data feature in <221> in SEQ ID (3)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (3)
W 213	Artificial or Unknown found in <213> in SEQ ID (4)
E 257	Invalid sequence data feature in <221> in SEQ ID (4)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (4)
W 213	Artificial or Unknown found in <213> in SEQ ID (5)
E 257	Invalid sequence data feature in <221> in SEQ ID (5)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (5)
W 213	Artificial or Unknown found in <213> in SEQ ID (6)
E 257	Invalid sequence data feature in <221> in SEQ ID (6)

Input Set:

Output Set:

Started: 2010-06-10 17:54:46.987
Finished: 2010-06-10 17:54:53.731
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 744 ms
Total Warnings: 32
Total Errors: 61
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code	Error Description
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (6)
W 213	Artificial or Unknown found in <213> in SEQ ID (7)
E 257	Invalid sequence data feature in <221> in SEQ ID (7)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (7)
W 213	Artificial or Unknown found in <213> in SEQ ID (8)
E 311	Invalid field content in <220> in SEQ ID (8)
E 257	Invalid sequence data feature in <221> in SEQ ID (8)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (8)
W 213	Artificial or Unknown found in <213> in SEQ ID (9)
E 257	Invalid sequence data feature in <221> in SEQ ID (9)
W 401	Unrecognized range formatin <222> in SEQID (9)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (9)
W 213	Artificial or Unknown found in <213> in SEQ ID (10)
E 257	Invalid sequence data feature in <221> in SEQ ID (10)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (10)
W 213	Artificial or Unknown found in <213> in SEQ ID (11)
E 311	Invalid field content in <220> in SEQ ID (11)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (11)
W 213	Artificial or Unknown found in <213> in SEQ ID (12)

Input Set:

Output Set:

Started: 2010-06-10 17:54:46.987
Finished: 2010-06-10 17:54:53.731
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 744 ms
Total Warnings: 32
Total Errors: 61
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code	Error Description
E 257	Invalid sequence data feature in <221> in SEQ ID (12)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (12)
W 213	Artificial or Unknown found in <213> in SEQ ID (13)
E 257	Invalid sequence data feature in <221> in SEQ ID (13)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (13)
W 213	Artificial or Unknown found in <213> in SEQ ID (14)
E 257	Invalid sequence data feature in <221> in SEQ ID (14)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (14)
W 213	Artificial or Unknown found in <213> in SEQ ID (15)
E 257	Invalid sequence data feature in <221> in SEQ ID (15)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (15)
W 213	Artificial or Unknown found in <213> in SEQ ID (16)
E 257	Invalid sequence data feature in <221> in SEQ ID (16)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (16)
W 213	Artificial or Unknown found in <213> in SEQ ID (17)
E 257	Invalid sequence data feature in <221> in SEQ ID (17)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (17)
W 213	Artificial or Unknown found in <213> in SEQ ID (18)
E 257	Invalid sequence data feature in <221> in SEQ ID (18)

Input Set:

Output Set:

Started: 2010-06-10 17:54:46.987
Finished: 2010-06-10 17:54:53.731
Elapsed: 0 hr(s) 0 min(s) 6 sec(s) 744 ms
Total Warnings: 32
Total Errors: 61
No. of SeqIDs Defined: 30
Actual SeqID Count: 30

Error code	Error Description
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (18)
W 213	Artificial or Unknown found in <213> in SEQ ID (19)
E 257	Invalid sequence data feature in <221> in SEQ ID (19)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (19)
W 213	Artificial or Unknown found in <213> in SEQ ID (20) This error has occurred more than 20 times, will not be displayed
E 257	Invalid sequence data feature in <221> in SEQ ID (20)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (20) This error has occurred more than 20 times, will not be displayed
E 257	Invalid sequence data feature in <221> in SEQ ID (21) This error has occurred more than 20 times, will not be displayed
E 311	Invalid field content in <220> in SEQ ID (23)
W 401	Unrecognized range format in <222> in SEQID (23)

SEQUENCE LISTING

<110> Christenson, Signe M.
Mikkelsen, Nikolaj D.
Frieden, Miriam
Hansen, Henrik F.
Koch, Troels
Pedersen, Daniel S.
Rosenbohm, Christoph
Thrue, Charlotte A.
Westergaard, Majken

<120> AMINO-LNA, THIO-LNA and ALPHA-L-OXY-LNA

<130> 22460-0003US1

<140> 10535472

<141> 2010-06-10

<150> PCT/DK03/00788

<151> 2003-11-18

<150> PA2002/01744

<151> 2002-11-18

<150> PA2003/015740

<151> 2003-10-20

<160> 30

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<210> 1

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> beta-D-amino-LNA Monomer

<400> 1

tccgtcatcg ctcttc

16

<210> 2

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> beta-D-amino-LNA Monomer

<400> 2

tccgtcatcg ctcttc

16

<210> 3

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> LNA Monomer

<400> 3

tccgtcatcg ctcttc

16

<210> 4

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (4), (12) (13), (14), (15), (16)

<223> beta-D-amino-LNA Monomer

<400> 4

ttttgtcatc gtcttt

16

<210> 5

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

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<221> (1), (2), (3), (4), (12), (13), (14), (15), (16)

<223> beta-D-amino-LNA Monomer

<400> 5

ttttgtcatc gtcttt

16

<210> 6

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

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<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> beta-D-amino-LNA Monomer

<400> 6

tccgtcatcg ctcttc

16

<210> 7
 <211> 16
 <212> DNA
 <213> ARTIFICIAL SEQUENCE

 <220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

 <400> 7
 tccgtcatcg ctcttc 16

 <210> 8
 <211> 16
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

 <400> 8
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 <210> 9
 <211> 16
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 <220>
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 <222> beta-D-amino-LNA Monomer

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 <220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

 <400> 10
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 <210> 11
 <211> 16
 <212> DNA
 <213> ARTIFICIAL SEQUENCE

<220> Modified-base
 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

 <400> 11
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 <210> 12
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

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 <210> 13
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-amino-LNA Monomer

 <400> 13
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 <210> 14
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 <213> ARTIFICIAL SEQUENCE

 <220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-thio-LNA Monomer

 <400> 14
 tccgtcatcg ctccctc 16

 <210> 15
 <211> 16
 <212> DNA
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 <220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-thio-LNA Monomer

 <400> 15

tccgtcatcg ctcttc 16

<210> 16
<211> 15
<212> DNA
<213> ARTIFICIAL SEQUENCE

<220>
<221> (1), (2), (3), (4), (12), (13), (14), (15), (16)
<223> beta-D-thio-LNA Monomer

<400> 16
tttgtcatcg tcttt 15

<210> 17
<211> 16
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<220>
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<222> (1), (2), (3), (13), (14), (15)
<223> beta-D-thio-LNA Monomer

<400> 17
tccgtcatcg ctcttc 16

<210> 18
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<220>
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<222> (1), (2), (3), (13), (14), (15)
<223> beta-D-thio-LNA Monomer

<400> 18
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<210> 19
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<213> ARTIFICIAL SEQUENCE

<220>
<221> (1), (2), (3), (13), (14), (15)
<223> beta-D-thio-LNA Monomer

<400> 19
tctgtaatag cccccc 16

<210> 20
<211> 16
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<213> ARTIFICIAL SEQUENCE

<220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> beta-D-thio-LNA Monomer

 <400> 20
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 <210> 21
 <211> 16
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 <213> ARTIFICIAL SEQUENCE

 <220>
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 <222> (1), (2), (3), (13), (14), (15)
 <223> alpha-L-oxy-LNA Monomer

 <400> 21
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 <210> 22
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 <220>
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 <223> alpha-L-oxy-LNA Monomer

 <400> 22
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 <210> 23
 <211> 16
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 <220> Modified-base
 <222> alpha-L-oxy-LNA Monomer

 <400> 23
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 <210> 24
 <211> 16
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 <220>
 <221> (1), (2), (3), (4), (6), (12), (14), (15), (16)
 <223> alpha-L-oxy-LNA Monomer

 <400> 24
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 <222> (1), (2), (3), (4), (8), (12), (13), (14), (15), (16)
 <223> alpha-L-oxy-LNA Monomer

 <400> 25
 ttccgcatc gtcttt 16

 <210> 26
 <211> 16
 <212> DNA
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 <220>
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 <222> (1), (2), (3), (4), (8), (12), (13), (14), (15), (16)
 <223> alpha-L-oxy-LNA Monomer

 <400> 26
 ttccgcatc gtcttt 16

 <210> 27
 <211> 16
 <212> DNA
 <213> ARTIFICIAL SEQUENCE

 <220>
 <221> (1), (2), (3), (13), (14), (15)
 <223> alpha-L-oxy-LNA Monomer

 <400> 27
 tccgcatcg ctcctc 16

 <210> 28
 <211> 16
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 <222> (1), (2), (3), (13), (14), (15)
 <223> alpha-L-oxy-LNA Monomer

 <400> 28
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 <210> 29
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<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> alpha-L-oxy-LNA Monomer

<400> 29

tctgtaatag cccccc

16

<210> 30

<211> 16

<212> DNA

<213> ARTIFICIAL SEQUENCE

<220>

<221> Modified-base

<222> (1), (2), (3), (13), (14), (15)

<223> alpha-L-oxy-LNA Monomer

<400> 30

tctgtaatag cccccc

16